

## **UPENN TCORS: Tobacco Product Messaging in a Complex Communication Environment**

Belief Echoes: Interventions to Correct Misleading Information about Tobacco Products

(Project 2)

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### **Abstract:**

Misinformation about tobacco products is ubiquitous in the public communication environment. This information is promulgated via tobacco product marketing strategies as well as the inferences that consumers make and then circulate to others in the fast-moving new media world. Misinformation can be explicit or implicit. Explicit misinformation is factually incorrect (low nicotine cigarettes are healthy) while implicit misinformation invites inferences not explicitly stated ("organic tobacco" implies "a healthier cigarette"). Such misinformation can mislead the public into underestimating the dangers or overestimating the benefits of various tobacco products. Even with immediate correction, traces of the misinformation can remain to influence subsequent judgments. These traces have been labeled "belief echoes". Misinformation can automatically alter emotion-laden beliefs, even after the original information is seen as untrue. Echoes are more likely when the corrective information is a simple textual refutation, ("simple correctives"). In a fast-paced communication environment, information processing is often automatic and emotion-laden, rather than deliberative and rational. With belief echoes for tobacco products, simple correction will be an ineffective method for responding to misinformation. Other types of de-biasing interventions - labeled here "enhanced corrections" - will need to be tested and deployed. The proposed project includes a series of experiments to: (a) examine the presence and effects of belief echoes for tobacco products and (b) identify the most effective strategies for corrective communications. These studies will focus on young adults (18-30, total n=6000) and, on a smaller scale, adolescents (13-17, total n= 2700). Content for the belief echoes will be five types of misleading tobacco product claims identified by the courts and four simple correctives also identified by the courts. The specific aims of the project are: Examine the presence and durability of "belief echoes" for misinformation about tobacco products (Study 1). Examine whether repetition of simple corrective information intensifies belief echoes (Study 1). Test three candidate classes of enhanced correctives in reducing the impact of misleading information (Study 2). These include: narrative reframing, online deception-training tools, and emotionally enriched corrective information. Test the likelihood of retransmission of enhanced correctives versus simple correctives from Tobacco FactCheck.org. (Study 3). This project examines the forms of communication that are effective in correcting misinformation about tobacco products. Findings will inform the FDA's efforts to communicate effectively about tobacco products by: providing tools to deploy effective corrective information about misleading claims, and identifying corrective messages that are most likely to be retransmitted through emerging social media.